TWO NEW SPECIES OF BLISTER BEETLES WITH AN ADDITIONAL NEW DESIGNATION (Meloidae)

By WILBUR R. ENNS[1] [2]

Through the courtesy of Dr. Richard B. Selander of the University of Illinois and of the British Museum (Natural History), several beetles from Mexico and Central America have been made available to the writer for study. Since some of these constitute species new to science they are being described here. An additional purpose is to make the names available for larval studies in progress elsewhere.

Zonitis oaxacae new species

Nemognatha tarasca (in part), Champion, 1892, Biologia Centrali-Americana, 4(2) : 379. **New Synonymy**

Zonitis tarasca tarasca (in part), Enns, 1956, Univ. Kansas Sci. Bull., 37(2) : 841-842. **New Synonymy**

Closely resembles *Zonitis tarasca* (Dugès) and obviously a member of the *sayi-dunniana* complex. Readily recognizable, however by the galeae extending to the metacoxae, the elytra densely, coarsely punctate with three feebly raised discal costae, moderately densely punctate pronotum, and greenish color.

Body surface moderately shining. Yellowish-green except eyes, antennae, palpi, extreme apices of femora, tibiae, tibial spurs, and tarsi black or fuscous. Ventral abdominal segments variable, usually brown with poorly defined black apical bands. Galeae pale, slender, in repose extending to metacoxae. Metatibial spurs large, spatulate, inner and outer subequal. Males with densely punctulate abdominal sterna. Length 9-11 mm.

MALE: Head elongate triangular (Fig. 3), distance from vertex to anterior margin of labrum slightly more than one fifth greater than distance across tempora, vertex evenly rounded, tempora very feebly inflated; surface coarsely, densely punctate except a narrow median line from vertex to between eyes almost impunctate, each puncture giving rise to to a short erect pale seta. Eyes moderately large, widely separated above and below, feebly emarginate behind antennal bases. Clypeus impressed, basal half punctate, distal half glabrous, anterior margin a straight transverse line. Labrum about as wide as long, outer margins punctate and pubescent, distal portion depressed, mandibles long, slender, evenly arcuate from bases to apices, sides punctate and hairy. Palpi long, slender, segments finely punctate and pubescent. Galeae pale, slender, pubescent, extending to metacoxae. Antennae moderately long, about two and one-half times as long as pronotum, each with first segment reaching half way across eye, moderately inflated, shining but punctate and pubescent; second two thirds as long as first, evenly but feebly enlarged from base to apex, shining, punctured and pubescent like first; third one and one-half times as long as second, somewhat flattened, more densely punctate and pubescent than second; fourth to tenth similar to third but progressively shorter; eleventh one and one-half times as long as tenth, distal third evenly tapered to subacute apex.

---

[1] Department of Entomology, University of Missouri. Contribution from Missouri Agricultural Experiment Station, Project 36, Entomology Museum, Journal Series No. 1940.

[2] Grateful acknowledgement is made to Mr. F. Eugene Wood, University of Missouri, for making the illustrations.

Pronotum (Fig. 2) shining, scarcely wider than long, widest at base, basal angles distinctly expanded, side margins feebly arcuate from base to anterior fourth, thence somewhat more abruptly narrowed, anterior margin evenly arcuate, basal margin somewhat sinuate; surface moderately densely punctate, less densely along median line, punctures each with a very short, fine pale seta; a shallow median impression at basal third not extending to base; entire pronotum somewhat tumid. Scutellum moderately large, uniformly densely and finely punctate, shallowly impressed distally, apex subacutely rounded. Elytra moderately shining, moderately densely punctate, sutures, three discal costae, and side margins distinctly elevated, discal costae not extending to apices of elytra, humeri somewhat inflated. Thorax beneath shining, uniformly dense and finely punctate, short pubescent. Abdomen finely, densely punctulate, very finely pubescent. Legs punctate and pubescent like thorax. Spurs of anterior tibiae long, slender, spur-like; of middle tibiae similar but somewhat flattened; metatibial spurs large, spatulate, inner subequal to outer in size. Sixth abdominal sternum medially cleft to the base, centrally impressed. Genitalia as illustrated (Fig. 1).

FEMALE: Similar to male but abdominal sterna not punctulate, moderately densely punctate and finely pubescent, sixth sternum not cleft, shallowly emarginate medially at apex.

Types: Holotype male from 13 miles South of El Camaron, Oaxaca, MEXICO, July 11, 1957, R. B. and J. M. Selander collectors. Allotype, San Geronimo, GUATEMALA, (G. C.) Champion collector. Two male paratypes, Los Tunillos, Oaxaca, Mexico, same data as holotype. One male paratype, same data as allotype. The holotype will be deposited in the Chicago Natural History Museum; the allotype and one male paratype in the British Museum (Natural History); and the other paratypes in the collections of R. B. Selander and the author.

Dr. Selander has informed me (*in litt.*) that the specimens from Oaxaca were taken on flowers of Compositae which have not yet been determined.

The specific name alludes to the general geographic area in which this species occurs.

This species belongs in the subgenus *Parazonitis* as defined by the writer (1956). In the key to the species (p. 819, *op. cit.*) this form would run to the *cribricollis-perforata-vittigera* complex from which it is at once distinct by its greenish color, costate elytra, and other characters.

The two specimens from San Geronimo, Guatemala are those referred to by Champion (1892) as "variety alpha" under *Nemognatha tarasca* (Dugès) and by the present writer (1956) under *Zonitis tarasca tarasca* (Dugès). They agree in every particular with the holotype of the new species here described except that the galeae are just a little shorter.

Zonitis nemognathoides new species

This species is unique in appearance, superficially resembling *Nemognatha miranda* Enns but the genitalic characteristics place it in *Zonitis.* Its affinities are not clear but it is probably near *Z. cribricollis* (LeConte). The adult morphology indicates it to be a member of the subgenus *Parazonitis.*

Body surface shining. Rather uniformly testaceous above and below except eyes, antennae, tips of mandibles, distal palpal segments, variable portions of the galeae, tibial spurs, and most tarsal segments fuscous or black. The two basal antennal segments in some specimens are pale; the galeae in others are testaceous, and the basal tarsal segments usually are pale. Galeae short, slender, extending only a little beyond mesocoxae. Metatibial spurs elongate-spatulate, similar and equal, contiguous. Length 8-9 mm.

MALE: Head triangular (Fig. 6), distance from vertex to anterior margin of labrum about one eighth less than distance across tempora, vertex evenly arcuate, tempora feebly inflated; surface irregular, densely, moderately coarsely punctate, each puncture giving rise to a short, fine, pale seta. Eyes moderately large, widely separated above and below, emarginate anteriorly. Clypeus impressed, distal half glabrous, basal half punctate and pubescent. Labrum scarcely wider than long, punctate and pubescent except median line, anterior margin rounded, feebly emarginate medially at apex. Mandibles moderately slender, outer margins straight (basal half), abruptly curved mesad at about half their lengths, sides punctate and hairy. Palpi shining but punctured and pubescent, segments slender. Galeae slender, shining, punctured and pubescent, no longer than distance from vertex to anterior margin of labrum. Antennae moderately long, about two and one-half times as long as pronotum, each with first segment shining, reaching half way across eye behind emargination, moderately inflated, sparsely punctured and pubescent; second somewhat more than two thirds as long as first, shining, punctured and pubescent like first, gradually but feebly widened from base to apex; third about as long as first, more densely punctured and pubescent than first and second, form similar to second; fourth to tenth similar to third but progressively slightly shorter, segments feebly flattened, eleventh about one fourth longer than tenth, apical fourth sharply tapered to apex.

Pronotum (Fig. 5) somewhat wider than long, disk shining, irregularly, moderately densely, coarsely punctate but finely pubescent except medially a feebly raised impunctate area on apical two thirds, a shallow depression anteriorly each side of median line; side margins rather evenly arcuate from anterior to posterior margins, posterior margin feebly but evenly arcuate. Scutellum moderately large, densely punctate and pubescent, a shiny carina near each lateral margin basally, apex subacutely rounded. Elytra shining, uniformly moderately densely and rather finely punctate, somewhat rugose-punctate at extreme bases and apices, clothed with short, erect pale setae, humeri faintly inflated, sutures and side margins feebly raised. Thorax beneath shining, finely punctate and pubescent. Abdomen beneath shining, more densely punctate and hairy than thorax. Legs shining, punctate and pubescent, more densely so on tarsi; spurs of anterior and middle legs short, slender, spurlike, metatibial spurs similar and equal, spatulate, inner margins contiguous. Fifth abdominal sternum broadly, shallowly emarginate medially, sixth medially cleft and centrally impressed. Genitalia as illustrated (Fig. 4).

FEMALE: Similar to male but abdominal sterna not so modified, posterior margin of fifth abdominal sternum almost straight, sixth shallowly emarginate medially at apex.

TYPES: Holotype male, El Refugio, San Luis Potosi, MEXICO, September 2, 1958, R. B. Selander collector. Allotype and three female paratypes, same data as holotype. The holotype and allotype will be deposited in the Chicago Natural History Museum. Paratypes will be added to the collections of R. B. Selander and the author. The allotype bears this notation: ''Eggs obtained in field from this female. Larvae Sept. 13, 1958.''

Selander has informed me (*in litt.*) that these specimens were taken on flowers of Compositae thus far undetermined.

In the key to the species of *Parazonitis* (Enns, 1956, p. 819) this species would run to the *vittigera-perforata* complex from which it is easily distinguishable by the rounded, uniformly punctate pronotum, uniformly and less densely punctate elytra, and pale color. Its indicated distribution is, of course, also quite different.

The specific name alludes to its remarkable resemblance to species of *Nemognatha.*

Zonitis interpretis Enns

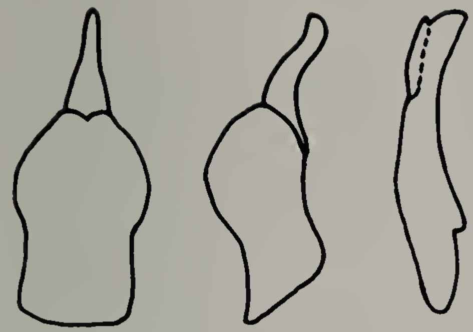
In 1956 (p. 817), the author named and described this species based on a single male specimen from the Chisos Mountains, Texas. The holotype is in the Ohio State University collection.

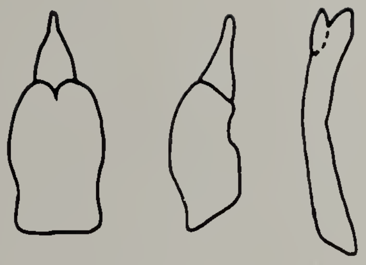
Recently, Dr. Floyd G. Werner of the University of Arizona sent a series of blister beetles to me for study. Among them was a single female specimen of *Z. interpretis.* It is exactly like the holotype except the elytra are somewhat more piceous and the abdominal sterna not modified as in the male but with the sixth sternum convex, apex truncate. The collection label reads Sabino Canyon, Catalina Mountains, Pima County, Arizona, August 8, 1955, F. G. Werner and G. D. Butler collectors. This specimen is hereby designated as the allotype of the species (NEW DESIGNATION). It will be deposited in the University of Arizona collections.

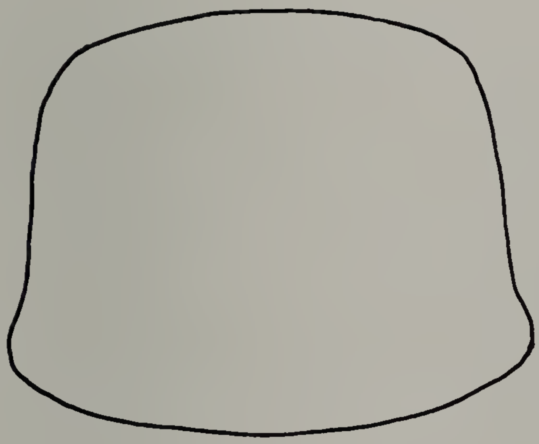
LITERATURE CITED

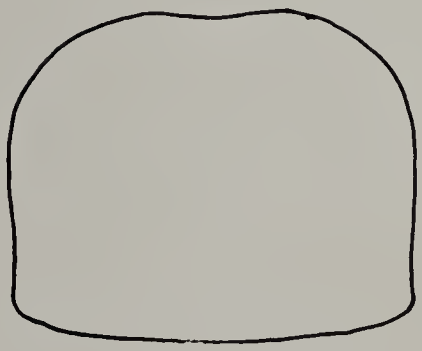
CHAMPION, G. C. 1892. Meloidae. Insecta, Coleoptera, Heteromera. Biologia Centrali-Americana, vol. 4, part 2, pp. 364-450.

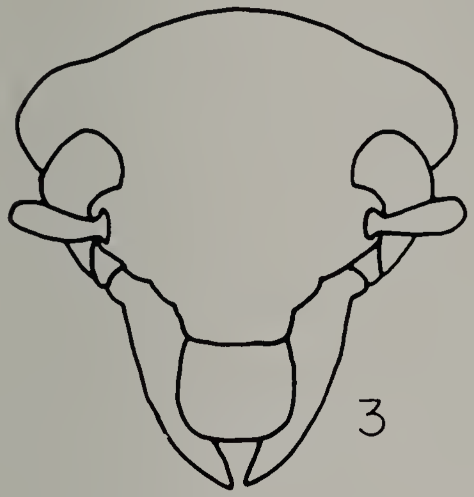
ENNS, W. R. 1956. A revision of the Genera *Nemognatha, Zonitis,* and *Pseudozonitis* (Coleoptera, Meloidae) in America North of Mexico, with a Proposed New Genus. Univ. of Kansas Sci. Bull., vol. 37, part 2, no. 17, pp. 685-909.

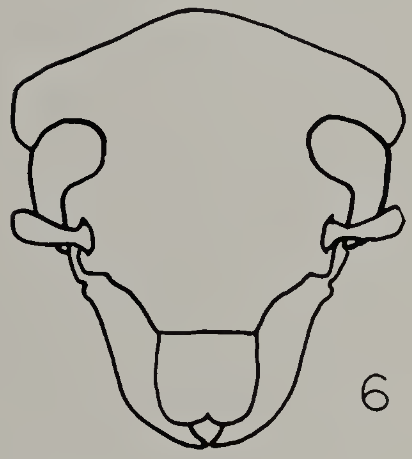

1


4


2


5


3


6

Figures 1-3. *Zonitis oaxacae* n. sp. Fig. 1—Dorsal and lateral aspects of male tegmen and lateral aspect of median lobe. Fig. 2—Dorsal outline of pronotum. Fig. 3—Cephalic aspect of head.

Figures 4-6. *Zonitis nemognathoides* n. sp. Fig. 4—Dorsal and lateral aspects of male tegmen and lateral aspect of median lobe. Fig. 5—Dorsal outline of pronotum. Fig. 6—Cephalic aspect of head.